for the new college has already been secured in the immediate vicinity of the Birmingham Town-hall, and now that the list of trustees is completed, the college may be expected to assume form very shortly.

THE announcement, a year or two ago, of the purchase by an American of the celebrated Hay collection of Egyptian antiquities, at the time on exhibition at the Crystal Palace in London, created quite a sensation, in view of its intrinsic value and the desire which had been manifested to procure it for the British Museum. In the increasing rarity of objects of this kind, resulting from the great demand on the part of national museums throughout the world, it is believed quite unlikely that such a collection will again be brought together. Its richness in mummies, objects in bronze, marble, alabaster, &c., together with those of smaller size usually found in Egyptian tombs and elsewhere, is very great. While this collection does not embrace many statues or immense sarcophagi, it is believed to be equal to any in the completeness of its series of the smaller objects of religious and domestic Egyptian antiquity, and not inferior to the best collections of Paris, London, Berlin, or Leyden. It was purchased by Mr. Samuel A. Way, of Boston, and removed to that city, and offered to the Museum of Fine Arts, under certain conditions, which the directors did not think best to accept. At the death of Mr. Way, however, it passed into the possession of Mr. Charles Granville Way, himself an artist of merit, who has in turn offered it to the same establishment without condition other than it is to be kept in a room by itself, and to be called the Way Collection. This stipulation, we learn from *Harper's Weekly*, was gladly agreed to, and the collection accepted by the trustees, and its treasures will doubtless before long be opened to the public.

Harper's Weekly states that among some collections of specimens of natural history and ethnology lately presented by Governor W. M. F. Arny, of New Mexico, to the Smithsonian Institution, were some mastodon remains, which were submitted by Prof. Henry to Prof. Leidy for examination. These were found to indicate the existence of a very remarkable species of mastodon (*M. obscurus*), very different from the common *M. americanus*, and previously known only by a few fragments from California and a tooth found many years ago in the Miocene formation of Maryland. One peculiarity of this species consists in the existence of enamel on the tusks of the upper jaw, which does not occur in the more modern *M. americanus*. It also had tusks in the lower jaw, projecting from the prolongation of the jaw, as in the adult of the Miocene *Mastodon angustidens* of Europe, and known only in the young animal of *M. americanus*. The specimen referred to will be figured by Prof. Leidy in his forthcoming report to Dr. Hayden on the vertebrate fossils of the Western Territories.

THE second part of "Mycological Illustrations of New and Rare Fungi," edited by W. W. Saunders, F.R.S., with illustrations by Mr. Worthington Smith, will be ready in a few days. Although more than a twelvemonth has elapsed since the publication of the first part, it is hoped that in future the parts will be issued more regularly at about quarterly intervals.

WE have just received the "Monthly Record of Results of Observations in Meteorology, Terrestrial Magnetism, &c., taken at the Melbourne Observatory during March, 1872; together with Abstracts from Meteorological Observations obtained at various localities in Victoria, under the superintendence of Robert L. J. Ellery, Government Astronomer." Prefixed is a useful table of the averages and extremes of different meteorological elements at Melbourne and other localities for a number of years; and the tables which follow, showing the daily registrations for the month of March, seem sufficiently minute in detail and drawn up with great care.

THE BRITISH ASSOCIATION MEETING AT BRIGHTON

FROM Edinburgh to Brighton is a great leap, and the change is not merely one of clime and latitude. Two towns could hardly be found presenting a greater contrast. We exchange an ancient seat of learning for a modern watering place, the narrow streets and lofty houses of the Old Town for the palatial dwellings of the Steyne, Arthur's Seat for the New Chain Pier, the memory of Scott for that of the Prince Regent. So far the migration has little to recommend it; but then we have the set-off of being within easy reach of London; the British Association has, in fact, never before held its meetings so near the capital, and the present may be looked on as an experimental trial of a metropolitan meeting.

The list of officers of the meeting, and of the sections, has already been announced. The following is the diary of proceedings for each day:—

Wednesday, August 14—General Committee in the Town Hall, at 1 P.M.; Committees of Sections, at 2 P.M.; Inaugural Address by the President, in the Dome, at 8 P.M. Thursday, August 15—Committees of Sections, at 10 A.M.; Sections, at 11 A.M.; *soirée* in the Dome, Corn Exchange and Museum, at 8 P.M. Friday, August 16—Committees of Sections, at 10 A.M.; Sections, at 11 A.M.; discourse in the Dome by Prof. P. Martin Duncan, F.R.S., on the Metamorphoses of Insects, at half-past 8 P.M. Saturday, August 17—Committees of Sections, at 10 A.M.; Sections, at 11 A.M. Excursions: lecture to working men by Wm. Spottiswoode, LL.D., F.R.S., on Sunshine, Sea, and Sky, in the Dome, at 8 P.M. Monday, August 19—Committees of Sections, at 10 A.M.; Sections, at 11 A.M.; General Committee in the Town Hall, at 3 P.M.; discourse in the Dome by Prof. W. K. Clifford, on the Aims and Instruments of Scientific Thought, at half-past 8 P.M. Tuesday, August 20—Committees of Sections, at 10 A.M.; Sections, at 11 A.M.; *soirée* in the Dome, Corn Exchange and Museum, at 8 P.M. Wednesday, August 21—General Committee in the Town Hall, at 1 P.M.; concluding General Meeting in the Dome, at half-past 2 P.M. Thursday, August 22—Excursions.

The reception room will be in the New Museum and Library, Pavilion, and the following will be the rooms for meetings of Sections:—A, Mathematical and Physical Science, Albion Room; B, Chemical Science, Lecture Room, New Museum; C, Geology, Town Hall; D, Biology, Pavilion; E, Geography, Concert Hall, Middle Street; F, Economic Science and Statistics, Old Ship Assembly Rooms; G, Mechanical Science, Friends' Meeting House, Ship Street.

An Exhibition of objects of interest and works of art will be on view, during the meeting, in the Corn Exchange, New Museum and Library, and the following Excursions have been arranged:—Saturday afternoon, August 17—(1) To Glynde Station, for Glynde Place, the Chalk Pits, and Mount Caburn; to Glynde Station, for Firle Place and Beacon; (2) to Lewes, Southover, and Mount Harry, returning to Stanmer Park; (3) to Worthing, thence to Cissbury, for the excavations by Captain Oliver, and then to Findon; (4) to Bramber, then to Steyning and Wiston. Thursday, August 22—(1) To Pevensey, Hastings, and Battle Abbey, thence to the Sub-Wealden Boring, or to Norman Hurst (residence of Mr. Thomas Brassey, M.P.); (2) to Arundel, Amberley, and Parham; (3) to Chichester and Goodwood; (4) to Portsmouth, for steamer through the Solent for Alum Bay, the Needles and Freshwater Bay, Isle of Wight; to Portsmouth, for the Dockyard, Shipping, &c.; (5) to Hayward's Heath, for Paxhill, Wakehurst Place, West Hoathly Rocks, and Whiteman's Green Quarry, Cuckfield.

The Marine Aquarium, of which we shall take an opportunity of giving an account when it is in a more complete state, will of course be one of the chief objects of attrac-

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tion to all the members of the Association, who will be admitted free, but "only a limited number daily." The great number of Lady Associates already announced is a prominent feature of the present meeting.

The following distinguished foreigners have already announced their intention of being present, viz.:—

Prof. Hébert, President of the Geological Society of France; Prof. van Benéden, of Louvain, and his son, a naturalist of great ability; Prof. Janssen, of Paris; Prof. Panceri, of Naples; Prof. H. A. Nicholson, of Toronto; Prof. Zengler, of Prague; Prof. Hale, of Albany, U.S.; while invitations have been sent to the following, who have been compelled reluctantly to decline the invitation:—

Prof. Hofmeister, Prof. Sir W. G. Logan, of Montreal; Prof. Clebsch, of Göttingen; Prof. Daubrée, of Paris; Prof. Young, of Dartmouth College, U.S.; Prof. Asa Gray, of Cambridge, U.S.; Prof. Gibbs, of Cambridge, U.S.; Principal Dawson, of Montreal; M. Quatrefages, of Paris; Prof. Kirchhoff, of Heidelberg; Prof. Helmholtz, of Berlin; Prof. Shaler, of Harvard College, U.S.

The customary courtesy of the officers of the Association has enabled us to give our readers this week the President's Address, as well as the opening addresses in Sections A, B, C, and D.

INAUGURAL ADDRESS OF DR. WILLIAM CARPENTER, F.R.S., PRESIDENT

THIRTY-SIX years have now elapsed since at the first and (I regret to say) the only meeting of this Association held in Bristol—which Ancient City followed immediately upon our National Universities in giving it a welcome—I enjoyed the privilege which I hold it one of the most valuable functions of these Annual assemblages to bestow; that of coming into personal relation with those distinguished Men whose names are to every cultivator of Science as "household words," and the light of whose brilliant example, and the warmth of whose cordial encouragement are the most precious influences by which his own aspirations can be fostered and directed. Under the Presidency of the Marquis of Lansdowne, with Conybeare and Prichard as Vice-Presidents, with Vernon Harcourt as General Secretary, and John Phillips as Assistant Secretary, were gathered together Whewell and Peacock, James Forbes and Sir W. Rowan Hamilton, Murchison and Sedgwick, Buckland and De la Beche, Henslow and Daubeny, Roget, Richardson, and Edward Forbes, with many others, perhaps not less distinguished, of whom my own recollection is less vivid.

In his honoured old age, Sedgwick still retains, in the Academic home of his life, all his pristine interest in whatever bears on the advance of the Science he has adorned as well as enriched; and Phillips still cultivates with all his old enthusiasm the congenial soil to which he has been transplanted. But the rest—our fathers and elder brother,—"Where are they?" It is for us of the present generation to show that they live in our lives; to carry forward the work which they commenced; and to transmit the influence of their own example to our own successors.

There is one of these great men, whose departure from among us since last we met claims a special notice, and whose life—full as it was of years and honours—we should have all desired to see prolonged for a few months, could its feebleness have been unattended with suffering. For we should all then have sympathised with Murchison, in the delight with which he would have received the intelligence of the safety of the friend in whose scientific labours and personal welfare he felt to the last the keenest interest. That this intelligence, which our own Expedition for the relief of Livingstone would have obtained (we will hope) a few months later, should have been brought to us through the generosity of one, and the enterprising ability—may I not use our peculiarly English word, the "pluck"—of another of our American brethren, cannot but be a matter of national regret to us. But let us bury that regret in the common joy which both Nations feel in the result; and while we give a cordial welcome to Mr. Stanley, let us glory in the prospect now opening, that England and America will co-operate in that noble object which—far more than the discovery of the Sources of the Nile—our great Traveller has set before himself as his true mission, the Extinction of the Slave Trade.

At the last Meeting of this Association I had the pleasure of being able to announce that I had received from the First Lord of the Admiralty a favourable reply to a representation I had ventured to make to him, as to the importance of prosecuting on a more extended scale the course of inquiry into the Physical and Biological conditions of the Deep Sea, on which, with my colleagues Prof. Wyville Thomson and Mr. J. Gwyn Jeffreys, I had been engaged for the three preceding years. That for which I had asked was a Circumnavigating Expedition of at least three years' duration, provided with an adequate Scientific Staff, and with the most complete Equipment that our experience could devise. The Council of the Royal Society having been led by the encouraging tenor of the answer I had received, to make a formal application to this effect, the liberal arrangements of the Government have been carried out under the advice of a Scientific Committee which included Representatives of this Association. H.M. ship *Challenger*, a vessel in every way suitable for the purpose, is now being fitted out at Sheerness; the command of the Expedition is intrusted to Captain Nares, an Officer of whose high qualifications I have myself the fullest assurance; while the Scientific charge of it will be taken by my excellent friend Prof. Wyville Thomson, at whose suggestion it was that these investigations were originally commenced, and whose zeal for the efficient prosecution of them is shown by his relinquishment for a time of the important Academic position he at present fills. It is anticipated that the Expedition will sail in November next; and I feel sure that the good wishes of all of you will go along with it.

The confident anticipation expressed by my predecessor, that for the utilisation of the total Eclipse of the Sun then impending, our Government would "exercise the same wise liberality as heretofore in the interests of Science," has been amply fulfilled. An Eclipse-Expedition to India was organised at the charge of the Home Government, and placed under the direction of Mr. Lockyer; the Indian Government contributed its quota to the work; and a most valuable body of results was obtained, of which, with those of the previous year, a Report is now being prepared under the direction of the Council of the Astronomical Society.

It has been customary with successive occupants of this Chair, distinguished as Leaders in their several divisions of the noble Army of Science, to open the proceedings of the Meetings over which they respectively presided, with a Discourse on some aspect of Nature in Relation to Man. But I am not aware that any one of them has taken up the other side of the inquiry—that which concerns Man as the "Interpreter of Nature;" and I have therefore thought it not inappropriate to lead you to the consideration of the Mental processes, by which are formed those fundamental conceptions of Matter and Force, of Cause and Effect, of Law and Order, which furnish the basis of all scientific reasoning, and constitute the *Philosophia prima* of Bacon. There is a great deal of what I cannot but regard as fallacious and misleading Philosophy—"oppositions of Science falsely so called"—abroad in the world at the present time. And I hope to satisfy you, that those who set up *their own conceptions* of the Orderly Sequence which they discern in the Phenomena of Nature, as fixed and determinate *Laws*, by which those phenomena not only *are* within all Human experience, but always *have been*, and always *must be*, invariably governed, are really guilty of the Intellectual arrogance they condemn in the Systems of the Ancients, and place themselves in diametrical antagonism to those real Philosophers, by whose comprehensive grasp and penetrating insight that Order has been so far disclosed. For what love of the Truth, as it is in Nature, was ever more conspicuous than that which Kepler displayed in his abandonment of each of the ingenious conceptions of the Planetary System which his fertile Imagination had successively devised, so soon as it proved to be inconsistent with the facts disclosed by observation? In that almost admiring description of the way in which his enemy Mars, "whom he had left at home as a despised Captive," had "burst all the chains of the equations, and broke forth from the prisons of the tables," who does not recognise the justice of Schiller's definition of the real Philosopher, as one who always loves Truth better than his System? And when at last he had gained the full assurance of a success so complete that (as he says) he thought he must be dreaming, or that he had been reasoning in a circle, who does not feel the almost sublimity of the self-abnegation, with which, after attaining what was in his own estimation such a glorious reward of his life of toil, disappointment, and self-sacrifice he abstains from claiming the applause of his contemporaries, but leaves his fame to after ages in these noble words:—"The book is written; to be read either now or by posterity, I care not which. It may well wait a

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